

Storm Sewers

General

Storm sewers are closed conduits which serve the purpose of collecting and conveying storm water from drainage areas to safe outlets. In urban areas, the installation of a storm sewer system is the basic element for proper water disposal. The system generally provides capacity for the safe disposal of storm water up to and including the 10-year, 24-hour frequency storm.

Design Criteria

The design criteria for storm sewers is generally specified by the city, town, or unit of government in whose jurisdiction the project is located. More information is available from the following references: Civil Engineering Handbook by Urquhart, Modern Sewer Design by the American Iron and Steel Institute, and Design and Construction of Sanitary Storm Sewers by the Water Pollution Control Federation and the American Society of Civil Engineers. The final layout and design of a storm sewer system should be approved by a registered professional engineer.

Design Aids

Appendix B may be used for estimating the runoff expected from a drainage area.

There are many hydrology aids available for estimating runoff such as Chapter 2 of the Soil Conservation Service Engineering Field Handbook and SCS Technical Release 55. Other guides and helps are available from the organizations listed above.

Specifications

All construction materials should meet applicable ASTM (American Society for Testing and Materials) or AASHTO (American Association of State Highway Transportation Officials) specifications.

Excavations, placement of conduits, backfilling, and other construction operations, should be performed in conformance with the requirements of OSHA (Occupational Safety and Health Act) and the requirements in the manual Design and Construction of Sanitary Storm Sewers.

Storm sewers are an integral part of urban development.

